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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/639,947	08/12/2003	Paul Brown	08436.0073USC1	6987
23552	7590	04/14/2006		
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			EXAMINER REDDING, DAVID A	
			ART UNIT	PAPER NUMBER

1744

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

CA

<b>Office Action Summary</b>	<b>Application No.</b> 10/639,947	<b>Applicant(s)</b> BROWN ET AL.	
	<b>Examiner</b> David A. Redding	<b>Art Unit</b> 1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-18 and 20-31 is/are pending in the application.
- 4a) Of the above claim(s) 12-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 20-31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of group II, claims 20-31 in the reply filed on 10-24-05 is acknowledged. The traversal is on the ground(s) that applicant disagrees with the basis. This is not found persuasive because no reasons for objecting to the restriction is given.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims s 23-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 23-26 mainly constitute process limitations. It is indefinite as to what structural features are defined by these limitations.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 20 thru 31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the

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invention. The claims essentially defines a composting tower which is constructed such that when it contains biodegradable materials at an infeed moisture content of between 50-70% the aeration rate provided by naturally induced upward draft due to the energy retained in the composting biomass is stoichiometrically matched to the biological oxygen demand. However, the specification does not provide sufficient direction as to how one estimates the amount of insulation needed for a specific size vertical, parallel-sided tower such that at an infeed moisture content between 50 thru 70% the aeration rate provided by naturally induced upward draft due to the energy retained in the composting biomass is stoichiometrically matched to biological oxygen demand.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 27, 28, are rejected under 35 U.S.C. 102(b) as being anticipated by USP 4,062,770 (Kneer).

The Kneer patent discloses an organic waste composting vessel (1) covered by heat insulation (2), with an air plenum (17) located in the bottom of the vessel, a grate (10) located below the plenum and a screw for removal of compost. The vessel (1) includes an introducing port (4) for continuously charging the vessel (see col.6, lines 19-67).

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The compost charged into the vessel has a moisture content between 40-70% and the composting process is controlled to maintain the compost temperature to 70 degrees C (col.7, lines 42-61).

### DECLARATION

The declaration under 37 CFR 1.132 filed 10/3/05 is insufficient to overcome the rejection of claims 20 thru 31 based upon 35 U.S.C. 112 1<sup>st</sup> paragraph as set forth in this Office action because: the declaration does not provide sufficient evidence that the specification as filed is enabled for one skilled in the art to make and use "a composting system" as claimed without undue experimentation. On the contrary, it is the examiners opinion that the statements provided in the declaration are further evidence that the specification is not enabled. Instead of relying on citations in the specification supporting enablement the declaration relies heavily upon "**The practical handbook of Compost Engineering**", Roger T. Haug (1993) text. See paragraph # 5,6,8,10, of the declaration. For example, in paragraph #5 applicant describes that the temperature in the chamber is dependent upon the aeration rate, chemical energy created by the compost, and rate of loss of heat from the pile. However, several assumptions must be made, such as difference in heat loss at the walls compared to the center of the compost pile, and heat loss by conduction through the walls and roof. Unfortunately, none of these assumptions necessary to calculate heat loss are described in the specification. More significantly, the specification is silent as to the need to calculate heat lost in estimating amount of insulation. The examiner doesn't doubt that the text cited by applicant describes the engineering principles upon which applicant's invention is based.

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However, the specification lacks any specific instruction to one skilled in the art as to how the information within the text would be used to make the composter as claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A. Redding whose telephone number is 571-272-1276. The examiner can normally be reached on Mon.-Fri. 6:00 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran-Piazza can be reached on 571-272-1224. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David A Redding  
Primary Examiner  
Art Unit 1744

DAR